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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,164	02/26/2004	Andrew Jay Bean	3638-115	9134
23117	7590	10/10/2006	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			CHIN SHUE, ALVIN C	
			ART UNIT	PAPER NUMBER
			3634	

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/786,164

Applicant(s)

BEAN ET AL.

Examiner

Alvin C. Chin-Shue

Art Unit

3634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2,9 and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The description as originally filed does not provide an adequate description of the single control switch, which applicant argues is not conventional and known.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-16,19 and 22 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Merz.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16,19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Fulton, McCabe et al, Tapper et al, or Shelton in view of Ashworth or Foley. Fulton, McCabe, Tapper and Shelton all teach the claimed method and lift with the exception of the pivotally coupled main boom. Ashworth and Foley teach a pivotally coupled main boom for pivotally supporting a workbasket or tool to a tower boom. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fulton, McCabe, Tapper or Shelton to comprise a pivotally coupled main boom, as taught by Ashworth or Foley, to enhance positioning of a work basket or tool. To prevent the extension of the tower boom until it reaches a predetermined angle as claimed would have been an obvious mechanical expediency.

Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Fulton, McCabe et al, Tapper et al, or Shelton and Ashworth or Foley, as applied above, and further in view of Yoshimatsu. Yoshimatsu teaches an inclinometer for sensing the angle of a boom with respect to gravity. It would have been obvious to one of ordinary skill in the art at the time the invention was made

to modify either Fulton, McCabe et al, Tapper et al, or Shelton to comprise a sensor, as taught by Yoshimatsu, for sensing the angle of their booms.

Claims 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Fulton, McCabe et al, Tapper et al, or Shelton, Ashworth or Foley, and Yoshimatsu, as applied to claims 17 and 20 above, and further in view of Rocke. Rocke teaches rotation sensors between pivotally attached main boom 115 and a tower boom 110 and a rotation sensor attached between the tower boom to determine the angle of the tower boom 115, wherein a control system determine the angle of the main boom based on the output of the sensors. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the booms of either Fulton, McCabe et al, Tapper et al, or Shelton to comprise sensors, as taught by Rocke, to determine the angle of the main boom. To use a conventional inclinometer as a sensor for the inclination of the tower boom, in lieu of the angle sensor, as taught by Rocke, would have been an obvious mechanical expediency.

Claims 17, 18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Fulton, McCabe et al, Tapper et al, or Shelton and Ashworth or Foley, as applied above, and further in view of Takahashi. Takahashi teaches sensors for sensing the angle and rotation of a boom. It would have been

obvious to one of ordinary skill in the art at the time the invention was made to modify the booms of either Fulton, McCabe et al, Tapper et al, or Shelton to comprise sensors, as taught by Takahashi, for sensing the angle and rotation of his boom. To use a conventional inclinometer as a sensor for the inclination of the tower boom, in lieu of the angle sensor, as taught by Takahashi, would have been an obvious mechanical expediency.

Claims 1,3-8,10,12-16,19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, Jr. '757 in view of Ashworth or Foley. Smith teaches the claimed method and lift with the exception of the pivotally coupled main boom. Ashworth teaches a pivotally coupled main boom for pivotally supporting a workbasket to a tower boom. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Smith to comprise a pivotally coupled main boom, as taught by Ashworth, to enhance positioning of a work basket. To prevent the extension of the tower boom until it reaches a predetermined angle as claimed would have been an obvious mechanical expediency.

Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith and Ashworth or Foley, as applied above, and further in view of Yoshimatsu. Yoshimatsu teaches an inclinometer for sensing the angle of a boom

with respect to gravity. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Smith to comprise a sensor, as taught by Yoshimatsu, for sensing the angle of his boom.

Claims 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, Ashworth or Foley, and Yoshimatsu, as applied to claims 17 and 20 above, and further in view of Rocke. Rocke teaches rotation sensors between pivotally attached main boom 115 and a tower boom 110 and a rotation sensor attached between the tower boom to determine the angle of the tower boom 115, wherein a control system determine the angle of the main boom based on the output of the sensors. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the booms of Smith to comprise sensors, as taught by Rocke, to determine the angle of the main boom. To use a conventional inclinometer as a sensor for the inclination of the tower boom, in lieu of the angle sensor, as taught by Rocke, would have been an obvious mechanical expediency.

Claims 17, 18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith and Ashworth or Foley, as applied above, and further in view of Takahashi. Takahashi teaches sensors for sensing the angle and rotation of a boom. It would have been obvious to one of ordinary skill in the art at the time

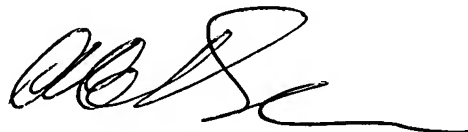
the invention was made to modify the booms of Smith to comprise sensors, as taught by Takahashi, for sensing the angle and rotation of his boom. To use a conventional inclinometer as a sensor for the inclination of the tower boom, in lieu of the angle sensor, as taught by Takahashi, would have been an obvious mechanical expediency.

Applicant's arguments filed 6/20/06 have been fully considered but they are not persuasive. With respect to Smith, the fact that his tower boom can be telescope simultaneously or independently with the raising and lowering of his tower boom, his tower boom nose can follow a plurality of paths.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin C. Chin-Shue whose telephone number is 571-272-6828. The examiner can normally be reached on Monday-Friday, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Alvin C. Chin-Shue
Examiner
Art Unit 3634

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